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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/530,803      | 06/12/2000  | HERVE CROZIER        | 365-444P            | 3623             |

2292 7590 07/31/2003

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| EXAMINER |
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LEE, RIP A

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| ART UNIT | PAPER NUMBER |
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1713

DATE MAILED: 07/31/2003

18

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application N .

09/530,803

Applicant(s)

CROZIER, HERVE

Examiner

Rip A. Lee

Art Unit

1713

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-5 and 7-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 7-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

### DETAILED ACTION

This office action follows a request for continued examination (RCE) under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), filed on June 2, 2003. Claims 1, 11, 14, and 15 have been amended. Notably, claim 1 has been amended to indicate the method by which the polymerized vinyl compound is incorporated into the propylene resin.

#### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims 1-5 and 7-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 4,551,501 to Shiga *et al.* in view of U.S. Patent No. 5,684,099 to Watanabe *et al.*

Shiga *et al.* discloses a polymer composition comprising a blend of crystalline polypropylene and 0.05-10,000 ppm by weight of a vinyl cycloalkane (claim 1). Treatment of a Ti/Et<sub>3</sub>Al catalyst with vinyl cyclohexane for 15 minutes results in the formation of poly(vinyl cyclohexane) containing the active catalyst. In a subsequent step, propylene is polymerized in the presence of the catalyst modified with a polymer containing vinyl units, prepared previously (see Example 1). Thus, the method recited in parent claim 1 is taught in the prior art. The inventors contemplate the use of additives normally incorporated into polypropylene, such as carbon black and pigments (col. 3, line 50), however, no specific amount of pigment is not disclosed.

Watanabe *et al.* discloses compositions comprising polypropylene polymer nucleated with polyvinyl cycloalkanes. According to the inventors, additives ordinarily employed in this art, such as a coloring agent, are typically used in an amount of 0.01-1 % by weight (col. 10, line 63). Thus, with respect to claims 1, 10 and 15, one having skill in the art would have found it obvious to use the same amount of coloring agent in the composition of Shiga *et al.*, in order to produce a colored polypropylene composition. One would have found it obvious to do so because both inventions relate to similar compositions.

Present claims 4, 5, 7, 8, 9, 11, and 14 describe meaningful developments of the current invention. These elements are obvious in view of the prior art. For instance, Shiga *et al.* teaches the use of vinyl cycloalkanes selected from vinyl cyclopentane and vinyl cyclohexane (claim 8),

Art Unit: 1713

and Watanabe *et al.* disclose use of carbon black, phthalocyanine, quinacridone, indolin, azo pigments, and titanium dioxide as coloring agents (col. 10, lines 54-56). Thus, it would have been obvious to use these materials because they are disclosed adequately in the prior art.

The reference is silent with respect to the particular properties recited in present claims 2, 3, and 12. However, a reasonable basis exists to believe that the prior art compositions would exhibit the same properties, especially in view of the fact that the prior art recites essentially the same composition. Since the PTO can not perform experiments, the burden is shifted to the Applicants to establish an unobviousness difference. *In re Best*, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977). *In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990).

Shiga *et al.* also use the composition for the manufacture of articles by the injection, extrusion, and blow molding techniques recited in present claim 12 (see col. 3, lines 60-63), and it would be obvious to one having skill in the art to use these molding techniques for making similar articles of manufacture. With respect to claims 3, intended use must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. See MPEP § 2111.02. There is no indication that the composition of the prior art can not be made into the claimed articles of manufacture. As such, the composition still meets the claims.

*Response to Arguments*

4. All claim rejections under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,684,099 to Watanabe *et al.* no longer apply since the rejection has been overcome by amendment.

5. Applicants traverse the previous rejection under 35 U.S.C. 103(a) as being unpatentable over Shiga *et al.* in view of Watanabe *et al.* Applicant's arguments have been considered fully, but they are not persuasive.

The Applicants indicate that Watanabe *et al.* state that coloring agents in amounts greater than 1 wt % impair the polymer properties. By doing so, the reference allegedly teaches away from the instant invention in which higher amounts of pigments, *i.e.*, up to 5 wt % is used. A declaration submitted under 37 C.F.R. 1.132 illustrates use of up to 5 wt % pigment without impairing polymer properties.

While the experiments furnished by the Applicants are thorough and illustrate their invention adequately, they do not detract from the fact that the range of 0.01-1.0 wt %, described in Watanabe *et al.* lies squarely within the range of 0.01-5 wt % set forth in the present claims (see below). Claims to a range of 0.01-5 wt % are not restricted to an upper range of 1-5 wt % nor do they exclude a lower range of 0.01-1 wt %.

Thus, it is maintained that the skilled artisan, upon reading both references, would have found it obvious to use the amount of pigment disclosed in Watanabe *et al.* in the compositions of Shiga *et al.*, and that one would find it obvious to combine references because both relate to colored, nucleated polypropylene compositions.

Art Unit: 1713

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rip A. Lee whose telephone number is (703)306-0094. The examiner can be reached on Monday through Friday from 9:00 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu, can be reached at (703)308-2450. The fax phone number for the organization where this application or proceeding is assigned is (703)746-7064. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0661.

ral

July 24, 2003



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